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SEQUENCE LISTING

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STRUCK, JOACHIM  
UHLEIN, MONIKA

<120> USES OF CARBAMOYL PHOSPHATE SYNTHETASE 1 (CPS 1) AND  
ITS FRAGMENTS FOR THE DIAGNOSIS OF INFLAMMATORY  
DISEASES AND SEPSIS

<130> 121778-04341933

<140> 10/511,756

<141> 2005-05-25

<150> PCT/EP03/03939

<151> 2003-04-15

<150> EP 020088415

<151> 2002-04-19

<160> 8

<170> PatentIn Ver. 2.1

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 Arg Pro Gly Ile Arg Leu Leu Ser Val Lys Ala Gln Thr Ala His Ile  
 35 40 45  
 Val Leu Glu Asp Gly Thr Lys Met Lys Gly Tyr Ser Phe Gly His Pro  
 50 55 60  
 Ser Ser Val Ala Gly Glu Val Val Phe Asn Thr Gly Leu Gly Gly Tyr  
 65 70 75 80  
 Pro Glu Ala Ile Thr Asp Pro Ala Tyr Lys Gly Gln Ile Leu Thr Met  
 85 90 95  
 Ala Asn Pro Ile Ile Gly Asn Gly Gly Ala Pro Asp Thr Thr Ala Leu  
 100 105 110  
 Asp Glu Leu Gly Leu Ser Lys Tyr Leu Glu Ser Asn Gly Ile Lys Val  
 115 120 125  
 Ser Gly Leu Leu Val Leu Asp Tyr Ser Lys Asp Tyr Asn His Trp Leu  
 130 135 140  
 Ala Thr Lys Ser Leu Gly Gln Trp Leu Gln Glu Glu Lys Val Pro Ala  
 145 150 155 160

Ile Tyr Gly Val Asp Thr Arg Met Leu Thr Lys Ile Ile Arg Asp Lys  
 165 170 175  
 Gly Thr Met Leu Gly Lys Ile Glu Phe Glu Gly Gln Pro Val Asp Phe  
 180 185 190  
 Val Asp Pro Asn Lys Gln Asn Leu Ile Ala Glu Val Ser Thr Lys Asp  
 195 200 205  
 Val Lys Val Tyr Gly Lys Gly Asn Pro Thr Lys Val Val Ala Val Asp  
 210 215 220  
 Cys Gly Ile Lys Asn Asn Val Ile Arg Leu Leu Val Lys Arg Gly Ala  
 225 230 235 240  
 Glu Val His Leu Val Pro Trp Asn His Asp Phe Thr Lys Met Glu Tyr  
 245 250 255  
 Asp Gly Ile Leu Ile Ala Gly Gly Pro Gly Asn Pro Ala Leu Ala Glu  
 260 265 270  
 Pro Leu Ile Gln Asn Val Arg Lys Ile Leu Glu Ser Asp Arg Lys Glu  
 275 280 285  
 Pro Leu Phe Gly Ile Ser Thr Gly Asn Leu Ile Thr Gly Leu Ala Ala  
 290 295 300  
 Gly Ala Lys Thr Tyr Lys Met Ser Met Ala Asn Arg Gly Gln Asn Gln  
 305 310 315 320  
 Pro Val Leu Asn Ile Thr Asn Lys Gln Ala Phe Ile Thr Ala Gln Asn  
 325 330 335  
 His Gly Tyr Ala Leu Asp Asn Thr Leu Pro Ala Gly Trp Lys Pro Leu  
 340 345 350  
 Phe Val Asn Val Asn Asp Gln Thr Asn Glu Gly Ile Met His Glu Ser  
 355 360 365  
 Lys Pro Phe Phe Ala Val Gln Phe His Pro Glu Val Thr Pro Gly Pro  
 370 375 380  
 Ile Asp Thr Glu Tyr Leu Phe Asp Ser Phe Phe Ser Leu Ile Lys Lys  
 385 390 395 400  
 Gly Lys Ala Thr Thr Ile Thr Ser Val Leu Pro Lys Pro Ala Leu Val  
 405 410 415  
 Ala Ser Arg Val Glu Val Ser Lys Val Leu Ile Leu Gly Ser Gly Gly  
 420 425 430  
 Leu Ser Ile Gly Gln Ala Gly Glu Phe Asp Tyr Ser Gly Ser Gln Ala  
 435 440 445  
 Val Lys Ala Met Lys Glu Glu Asn Val Lys Thr Val Leu Met Asn Pro  
 450 455 460

Asn	Ile	Ala	Ser	Val	Gln	Thr	Asn	Glu	Val	Gly	Leu	Lys	Gln	Ala	Asp	465	470	475	480
Thr	Val	Tyr	Phe	Leu	Pro	Ile	Thr	Pro	Gln	Phe	Val	Thr	Glu	Val	Ile	485	490	495	
Lys	Ala	Glu	Gln	Pro	Asp	Gly	Leu	Ile	Leu	Gly	Met	Gly	Gly	Gln	Thr	500	505	510	
Ala	Leu	Asn	Cys	Gly	Val	Glu	Leu	Phe	Lys	Arg	Gly	Val	Leu	Lys	Glu	515	520	525	
Tyr	Gly	Val	Lys	Val	Leu	Gly	Thr	Ser	Val	Glu	Ser	Ile	Met	Ala	Thr	530	535	540	
Glu	Asp	Arg	Gln	Leu	Phe	Ser	Asp	Lys	Leu	Asn	Glu	Ile	Asn	Glu	Lys	545	550	555	560
Ile	Ala	Pro	Ser	Phe	Ala	Val	Glu	Ser	Ile	Glu	Asp	Ala	Leu	Lys	Ala	565	570	575	
Ala	Asp	Thr	Ile	Gly	Tyr	Pro	Val	Met	Ile	Arg	Ser	Ala	Tyr	Ala	Leu	580	585	590	
Gly	Gly	Leu	Gly	Ser	Gly	Ile	Cys	Pro	Asn	Arg	Glu	Thr	Leu	Met	Asp	595	600	605	
Leu	Ser	Thr	Lys	Ala	Phe	Ala	Met	Thr	Asn	Gln	Ile	Leu	Val	Glu	Lys	610	615	620	
Ser	Val	Thr	Gly	Trp	Lys	Glu	Ile	Glu	Tyr	Glu	Val	Val	Arg	Asp	Ala	625	630	635	640
Asp	Asp	Asn	Cys	Val	Thr	Val	Cys	Asn	Met	Glu	Asn	Val	Asp	Ala	Met	645	650	655	
Gly	Val	His	Thr	Gly	Asp	Ser	Val	Val	Val	Ala	Pro	Ala	Gln	Thr	Leu	660	665	670	
Ser	Asn	Ala	Glu	Phe	Gln	Met	Leu	Arg	Arg	Thr	Ser	Ile	Asn	Val	Val	675	680	685	
Arg	His	Leu	Gly	Ile	Val	Gly	Glu	Cys	Asn	Ile	Gln	Phe	Ala	Leu	His	690	695	700	
Pro	Thr	Ser	Met	Glu	Tyr	Cys	Ile	Ile	Glu	Val	Asn	Ala	Arg	Leu	Ser	705	710	715	720
Arg	Ser	Ser	Ala	Leu	Ala	Ser	Lys	Ala	Thr	Gly	Tyr	Pro	Leu	Ala	Phe	725	730	735	
Ile	Ala	Ala	Lys	Ile	Ala	Leu	Gly	Ile	Pro	Leu	Pro	Glu	Ile	Lys	Asn	740	745	750	
Val	Val	Ser	Gly	Lys	Thr	Ser	Ala	Cys	Phe	Glu	Pro	Ser	Leu	Asp	Tyr	755	760	765	

Met Val Thr Lys Ile Pro Arg Trp Asp Leu Asp Arg Phe His Gly Thr  
 770 775 780  
 Ser Ser Arg Ile Gly Ser Ser Met Lys Ser Val Gly Glu Val Met Ala  
 785 790 795 800  
 Ile Gly Arg Thr Phe Glu Glu Ser Phe Gln Lys Ala Leu Arg Met Cys  
 805 810 815  
 His Pro Ser Ile Glu Gly Phe Thr Pro Arg Leu Pro Met Asn Lys Glu  
 820 825 830  
 Trp Pro Ser Asn Leu Asp Leu Arg Lys Glu Leu Ser Glu Pro Ser Ser  
 835 840 845  
 Thr Arg Ile Tyr Ala Ile Ala Lys Ala Ile Asp Asp Asn Met Ser Leu  
 850 855 860  
 Asp Glu Ile Glu Lys Leu Thr Tyr Ile Asp Lys Trp Phe Leu Tyr Lys  
 865 870 875 880  
 Met Arg Asp Ile Leu Asn Met Glu Lys Thr Leu Lys Gly Leu Asn Ser  
 885 890 895  
 Glu Ser Met Thr Glu Glu Thr Leu Lys Arg Ala Lys Glu Ile Gly Phe  
 900 905 910  
 Ser Asp Lys Gln Ile Ser Lys Cys Leu Gly Leu Thr Glu Ala Gln Thr  
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 Arg Glu Leu Arg Leu Lys Lys Asn Ile His Pro Trp Val Lys Gln Ile  
 930 935 940  
 Asp Thr Leu Ala Ala Glu Tyr Pro Ser Val Thr Asn Tyr Leu Tyr Val  
 945 950 955 960  
 Thr Tyr Asn Gly Gln Glu His Asp Val Asn Phe Asp Asp His Gly Met  
 965 970 975  
 Met Val Leu Gly Cys Gly Pro Tyr His Ile Gly Ser Ser Val Glu Phe  
 980 985 990  
 Asp Trp Cys Ala Val Ser Ser Ile Arg Thr Leu Arg Gln Leu Gly Lys  
 995 1000 1005  
 Lys Thr Val Val Val Asn Cys Asn Pro Glu Thr Val Ser Thr Asp Phe  
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 Asp Glu Cys Asp Lys Leu Tyr Phe Glu Glu Leu Ser Leu Glu Arg Ile  
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 Leu Asp Ile Tyr His Gln Glu Ala Cys Gly Gly Cys Ile Ile Ser Val  
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 Gly Gly Gln Ile Pro Asn Asn Leu Ala Val Pro Leu Tyr Lys Asn Gly  
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Val Lys Ile Met Gly Thr Ser Pro Leu Gln Ile Asp Arg Ala Glu Asp  
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 Arg Ser Ile Phe Ser Ala Val Leu Asp Glu Leu Lys Val Ala Gln Ala  
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 Pro Trp Lys Ala Val Asn Thr Leu Asn Glu Ala Leu Glu Phe Ala Lys  
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 Ser Val Asp Tyr Pro Cys Leu Leu Arg Pro Ser Tyr Val Leu Ser Gly  
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 Ser Ala Met Asn Val Val Phe Ser Glu Asp Glu Met Lys Lys Phe Leu  
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 Glu Glu Ala Thr Arg Val Ser Gln Glu His Pro Val Val Leu Thr Lys  
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 Phe Val Glu Gly Ala Arg Glu Val Glu Met Asp Ala Val Gly Lys Asp  
 1170 1175 1180  
 Gly Arg Val Ile Ser His Ala Ile Ser Glu His Val Glu Asp Ala Gly  
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 Val His Ser Gly Asp Ala Thr Leu Met Leu Pro Thr Gln Thr Ile Ser  
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 Gln Gly Ala Ile Glu Lys Val Lys Asp Ala Thr Arg Lys Ile Ala Lys  
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 Ala Phe Ala Ile Ser Gly Pro Phe Asn Val Gln Phe Leu Val Lys Gly  
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 Asn Asp Val Leu Val Ile Glu Cys Asn Leu Arg Ala Ser Arg Ser Phe  
 1250 1255 1260  
 Pro Phe Val Ser Lys Thr Leu Gly Val Asp Phe Ile Asp Val Ala Thr  
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 Lys Val Met Ile Gly Glu Asn Val Asp Glu Lys His Leu Pro Thr Leu  
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 Asp His Pro Ile Ile Pro Ala Asp Tyr Val Ala Ile Lys Ala Pro Met  
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 Phe Ser Trp Pro Arg Leu Arg Asp Ala Asp Pro Ile Leu Arg Cys Glu  
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 Met Ala Ser Thr Gly Glu Val Ala Cys Phe Gly Glu Gly Ile His Thr  
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 Ala Phe Leu Lys Ala Met Leu Ser Thr Gly Phe Lys Ile Pro Gln Lys  
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 Gly Ile Leu Ile Gly Ile Gln Gln Ser Phe Arg Pro Arg Phe Leu Gly  
 1365 1370 1375

Val Ala Glu Gln Leu His Asn Glu Gly Phe Lys Leu Phe Ala Thr Glu  
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Ala Thr Ser Asp Trp Leu Asn Ala Asn Asn Val Pro Ala Thr Pro Val  
                   1395                  1400                  1405

Ala Trp Pro Ser Gln Glu Gly Gln Asn Pro Ser Leu Ser Ser Ile Arg  
                   1410                  1415                  1420

Lys Leu Ile Arg Asp Gly Ser Ile Asp Leu Val Ile Asn Leu Pro Asn  
                   1425                  1430                  1435                  1440

Asn Asn Thr Lys Phe Val His Asp Asn Tyr Val Ile Arg Arg Thr Ala  
                   1445                  1450                  1455

Val Asp Ser Gly Ile Pro Leu Leu Thr Asn Phe Gln Val Thr Lys Leu  
                   1460                  1465                  1470

Phe Ala Glu Ala Val Gln Lys Ser Arg Lys Val Asp Ser Lys Ser Leu  
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Phe His Tyr Arg Gln Tyr Ser Ala Gly Lys Ala Ala  
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Asn

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